

REMARKS

Claims 1-16 are pending in this application, with Claims 1, 13, and 14 being independent. Claim 16 has been added to assure Applicant of a full measure of protection of the scope to which he deems himself entitled.

Claims 1, 2, and 6-15 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 6,057,884 to Chen et al. in view of U.S. Patent 6,295,380 to Takahashi. Claims 3-5 were rejected as being obvious from Chen et al. and Takahashi, and further in view of U.S. Patent 5,774,548 to Bando et al.

The present invention provides improvements to data decoding processing of, for example, image and audio signals in a digital TV receiver or a digital storage medium reproduction apparatus. One particular aim of the present invention is to provide higher-quality images in accordance with subscription viewing or interactive programs.

Claim 1 is directed to a decoding apparatus, comprising an input unit, a separation unit, a judgment unit, a control unit, an outputting unit, and a synthesis unit. The input unit inputs a bitstream obtained by coding a plurality of object data in units of objects and multiplexing the coded data. The plurality of object data are data which provide a desired scalability in accordance with a combination among the plurality of object data. The separation unit separates coded data of each object from the bitstream, and the judgment unit judges permission of reproduction of the coded data and a level of reproduction-permitted scalability. The control unit is adapted to perform reproduction-control according to the judged permission of reproduction and the level of reproduction-permitted scalability. The outputting unit decodes the coded data of the object in

accordance with the control unit, and outputs the decoded data. The synthesis unit synthesizes the object data outputted by the outputting unit.

One notable feature of Claim 1 is judging permission of reproduction of coded data and a level of reproduction-permitted scalability, and performing reproduction-control according to the judged permission of reproduction of the coded data and the judged level of reproduction-permitted scalability.

By virtue of the features of Claim 1, the decoding apparatus is able to perform fine reproduction-control according to the permission of reproduction of the coded data and the level of reproduction-permitted scalability. In particular, in the reproduction-control according to the permission of reproduction of the coded data, for example, it is possible to perform audio/video reproduction-control as to whether or not to permit a user to reproduce the coded data. Moreover, in the reproduction-control according to the level of reproduction-permitted scalability, for example, it is possible to perform reproduction-control of an audio/video level in regard to whether or not to provide a high-quality image.

Chen et al., as understood by Applicant, relates to temporal and spatial scaleable coding for video object planes. Chen et al. discusses that multiplexed coded data is divided into enhancement layer data and base layer data, and that the divided data are decoded and synthesized. However, Chen et al. does not disclose or suggest any technical concept of judging permission of reproduction of the coded data and a level of reproduction-permitted scalability, and performing reproduction-control according to the judged permission of reproduction of the coded data and the judged level of reproduction-permitted scalability, as recited in Claim 1. Indeed, this point is conceded in the Office Action at page 3.

Takahashi, as understood by Applicant, relates to an object data processing apparatus for decoding N pieces of coded data (where N is a positive integer) obtained by compressively coding N pieces of object data which constitute individual data to be recorded or transmitted and have a hierarchical structure, for each object data. However, Takahashi merely discusses that an object designation signal is input, and thus the designated object is selected from the multiplexed bit stream. Takahashi is silent about judgment of permission of reproduction of the coded data, judgment of a level of reproduction-permitted scalability, and reproduction-control according to the judged permission of reproduction of the coded data and the judged level of reproduction-permitted scalability, as recited in Claim 1.

Furthermore, the Office Action submits that the system of Takahashi can be incorporated into the system of Chen et al. With such a hypothetical combination, in the device shown in Fig. 1 of Chen et al., a signal for designating an enhancement layer or a base layer might first be input, and then the designated layer might be selected. However, Applicant submits that, even if such a hypothetical combination were to be made (which, in any event, is not admitted as being obvious or technically feasible), the permission of reproduction of the coded data would not be judged, and/or the level of the reproduction-permitted scalability would not be judged.

Accordingly, Applicant submits that even if Chen et al. were combined with Takahashi et al. (assuming such a combination is even feasible), such a hypothetical combination would not achieve the above-mentioned technical concept which is achieved by virtue of the features of Claim 1.

Accordingly, Claim 1 is believed to be patentable over Chen et al. and Takahashi, either alone or any permissible combination (if any).

Independent Claims 13 and 14 are method and computer-readable storage medium claims, respectively, corresponding to apparatus Claim 1, and are believed to be patentable over Chen et al. and Takahashi for at least the same reasons as discussed above in connection with Claim 1.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

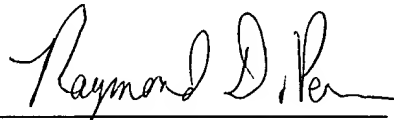
The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. Accordingly, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, he is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Raymond D. Iken", written over a horizontal line.

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